

Contributions.

CALIFORNIA, ITS PRODUCTS AND MARKETS.

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Having spoken in a previous paper of the diversified surface and climate of California it is, of course, not to be expected that any one statement would answer for the whole country. At any rate, such is the fact. So, let it be constantly remembered by my kind readers, that I am not writing of a particular place, which was located and briefly described in my last communication. In future papers, I shall no doubt have something to say of other parts of this great state, as I have opportunity to see them.

The products of the soil are so numerous that I shall not even try to mention all of them. In fact almost anything one could mention in the vegetable line, is grown successfully in the state. Thus even here, I have seen oranges and lemons growing without any protection, while figs and olives are quite common, the former yielding as many as three crops per year. For a long time after the first settlements were made in this section of country, no one suspected that fruit could be successfully grown here, so all effort was given to the raising of grain and live stock. Even yet, fruit raising is little more than an experiment in this locality, while in others, it is by far the leading industry. So far as it has been tried, it has proven quite a success, and peaches, apricots, almonds, prunes, pears, quinces, olives, figs, apples, and melons, are all in plentiful evidence in their seasons, as are also all kinds of berries. As to quality of this fruit, one can at first say little,—he is almost too astonished to do anything but stare. The apricot crop was over when we came, but if they are as fine as other fruit I have seen, I could scarcely say too much in praise of them. I have seen and ate peaches here, which measured $11\frac{3}{4}$ inches in circumference and weighed $14\frac{1}{2}$ oz. avoirdupois, while I am told on good authority that peaches weighing a full pound, are by no means uncommon. I have had the pleasure of sampling Bartlett pears, six inches long, and almost five in diameter, and have seen quinces so large, that you could hardly believe it, if I should give you their dimensions. Apples, too, are fine, but no more so than I have often seen in the east, but they are considerably higher in price here. I think however, that California grapes are finer in proportion than any of its fruit, if such a thing can be. The clusters are very large weighing as much as four and five pounds, while their fruit is big, and

very sweet, and very good indeed and also generally very plentiful. The vines are not trellised up, as in the east, but are so pruned as to develop into a tree like form from three to four feet high. The parent stem, when sufficiently aged, is large and erect, and each year all the growth of the preceding season is pruned off, so that in spring time, a vineyard resembles somewhat a field of posts. There is a great deal of work for one engaged in the fruit business, as I have discovered. The trees are to be cultivated often, no matter how large they may be. They must be irrigated, pruned carefully every year, sprayed well, at the proper time, and then the fruit must be thinned out, leaving only about one fourth of it on the trees. Otherwise it will be small, and generally inferior in quality so that there will be no market for it. After all this has been done, and the product is fully matured, then comes the gathering, drying and marketing. When there are only a few trees, this work does not amount to much, nor are the monetary returns very great, but when there are many thousands of trees in the orchards, to be treated as above described, then it means labor, from which there is little respite at any season of the year. So you will observe that here, as in every other place in this great world of ours, "There is no excellence without great labor." While in this, San Joaquin Co., fruit raising is but an infant industry, you will think that it is rather an extensive experiment, when I tell you that in 1893, it had 424,168 fruit trees in its orchards. These covered an area of 15,980 acres, besides there were 4,880 acres in grapes. From our county seat, during the same year, about 2000 tons of fruit were shipped into the markets of the world. Lest you should think that I had under-estimated the infancy of the fruit business here, seeing that I have written such large figures, I will only need to call your attention to the fact that this county is very much larger than eastern ones usually are. In fact, San Joaquin Co., is more than 50 miles wide, and will average about 75 in length. From this statement of its area, you will at once see that there is much land not yet planted in trees, within its boundaries. The farms are very large, but most of the orchards are comparatively small. There is, I think only one very large one in the county,—it covers 3200 acres.

I have already said that horticulture is not the principal industry. This is more especially a grain-growing district. In fact it makes little pretensions about being anything else. The grain raised is principally barley, rye and wheat, with the latter far in the lead. The grain fields are

great indeed, to those who are accustomed to sowing and reaping the much smaller ones of the east. If the fields are large, so is the product, for it annually runs away up into the millions of bushels; the wheat crop alone, of this county, averages four million bushels per year. This wheat is of the variety called spring wheat in the eastern states, there being practically none of the winter variety sown. About Nov. 15, the plowing usually begins, and is not all done before Feb. 1. The manner of plowing is upon the large scale too. Gang plows, containing from three to six shares are used, and these implements are drawn by from six to ten horses or mules. Sometimes two gangs are lashed together, and the number of "animals," as horses are here called, is doubled, though one man drives them all. In this manner, two men plow as much as forty acres per day. A seeder is attached to these plows, and behind it, a light harrow is dragged, being also attached to the plow, so that when the plowing is done, the sowing is too. Thus, with favorable weather, some grain will be up nicely, while other is being sown, and much of it yet to sow. The wheat is generally treated with "bluestone" because it is supposed to prevent smut. The manner of putting in the grain, would make you suspect that much is sown by the various farmers. Well, the acreage per farm, varies between 200 and 5000 or more acres. The product is not reckoned by the "ranchmen" in bushels, but by the number of sacks it will yield per acre, each sack holding from 130 to 140 pounds, according to the quality of grain and thoroughness of cleaning. It is sold at so much per hundred pounds, instead of bushels too. The harvesting is also carried on, on the same large scale as the plowing and sowing, and the self binder so common in the east, is entirely too slow for California. Great headers and combined harvesters handle the largest crop with dispatch far beyond the methods with which I have been familiar. The headers cut a swath anywhere from 10 to 20 feet in width, and are drawn by from 12 to 20 horses. They cut low enough to get all the heads, and discharge the cut grain in huge "header boxes," which are driven along by the side of the machine until full, when an empty one takes its place. The full one is then unloaded on a stack. From these stacks, the grain is afterward threshed by much larger machines than any I had ever seen before coming here. Besides the very large machine itself, there is also a cleaner almost as large as the ordinary thresher which runs in connection with the separator. And then there is a great derrick like arrangement for getting the grain from the